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Claims:

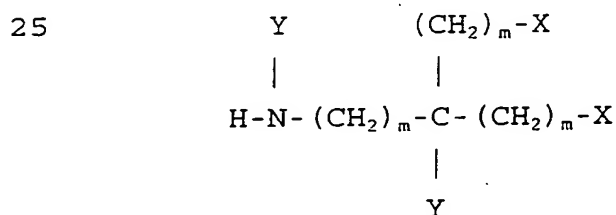
1. A compound comprising a radically asymmetric  
5 dendrimeric polymer backbone with linked thereto at  
least one reporter moiety, said polymer backbone  
comprising a plurality of amine-containing acids.

2. A compound as claimed in claim 1, wherein said  
10 polymer backbone comprises a plurality of native or non-  
native amino acid residues.

3. A compound as claimed in claim 2, wherein said  
15 polymer backbone comprises from 3 to 200 amino acid  
residues.

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4. A compound as claimed in any one of claims 1 to 3,  
wherein said dendrimeric polymer backbone comprises from  
3 to 200 amino acid residues extending radially from a  
20 central core moiety.

5. A compound as claimed in claim 4, wherein said core  
moiety is selected from  $\text{H}_2\text{NCOCH}_2\text{CH}_2\text{CONH}_2$ , and



30 (wherein  $m=0-4$ ;

each Y independently represents hydrogen or an  
alkyl or aryl group; and

each X independently represents a  $-\text{CO}_2\text{H}$ ,  $-\text{SO}_2\text{Cl}$  or  
 $-\text{CH}_2\text{Br}$  group) and derivatives thereof.

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6. A compound as claimed in claim 4, wherein said core  
moiety comprises a reporter moiety.

7. A compound as claimed in claim 4, wherein said core moiety comprises a targeting agent capable of travelling to or binding specifically to targeted cells, tissues, organs or other locations in a mammalian body.

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8. A compound as claimed in any preceding claim, wherein said polymer backbone has a molecular weight of from 300 to 20,000 daltons.

10 9. A compound as claimed in any one of claims 2 to 8, wherein said polymer backbone comprises a polymer of a single species or at least two different species of amino acids, or a block copolymer.

15 10. A compound as claimed in claim 9, wherein said polymer backbone is poly-L-aspartic acid.

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11. A compound as claimed in any preceding claim comprising from 3 to 200 reporter moieties.

12. A compound as claimed in any preceding claim, wherein each reporter moiety is linked to said polymer backbone via a biodegradable linking group.

25 13. A compound as claimed in claim 12, wherein said linking group is selected from amide, ether, thioether, guanidyl, acetal, ketal and phosphoester groups.

30 14. A compound as claimed in claim 12, wherein said linking group comprises an amide bond, the amide nitrogen deriving from the backbone molecule and the amide carbonyl deriving from a carboxyl or carboxyl derivative on the reporter group.

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15. A compound as claimed in any preceding claim, wherein at least one reporter moiety comprises a diagnostic or therapeutic agent.

16. A compound as claimed in claim 15, wherein said agent comprises the residue of a chelating agent or metal chelate thereof.

5 17. A compound as claimed in claim 16, wherein said chelating agent is a contrast agent comprising at least one paramagnetic metal ion.

10 18. A compound as claimed in claim 17, wherein said metal ion is selected from the lanthanide metal ions, Mg, Ca, Sc, Ti, B, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Sr, Y, Zr, Tc, Ru, In, Hf, W, Re, Os, Pb and Bi.

20 19. A compound as claimed in claim 16 or claim 17, wherein said chelating agent is selected from ethylenediamine tetraacetic acid (EDTA), diethylenetriamine pentaacetic acid (DTPA), 1,4,7,10-tetraazacyclododecanetetraacetic acid (DOTA), 1,4,7,10-tetraazacyclododecane-1,4,7-triacetic acid (DO3A), 1-oxa-4,7,10-triazacyclododecanetriacetic acid (DOXA), 1,4,7-triazacyclononanetriacetic acid (NOTA) and 1,4,8,11-tetraazacyclotetradecanetetraacetic acid (TETA).

25 20. A compound as claimed in claim 16 or claim 17, wherein said chelating agent is selected from 4'-(3-amino-4-methoxy-phenyl)-6,6"-bis(N',N'-dicarboxymethyl-N-methylhydrazino)-2,2':6',2"-terpyridine (THT) and 4'-(3-amino-4-methoxy-phenyl)-6,6"-bis[N,N-di(carboxymethyl)aminomethyl]-2,2':6',2"-terpyridine (TMT).

35 21. A compound as claimed in claim 15, wherein said agent comprises an ionic or non-ionic iodinated monocyclic or bis-cyclic X-ray contrast agent.

22. A compound as claimed in any preceding claim linked to a targeting agent capable of travelling to or binding specifically to targeted cells, tissues, organs or other locations in a mammalian body.

23. A compound as claimed in claim 7 or claim 22, wherein said targeting agent comprises *E. coli* heat stable enterotoxin STA or an analogue thereof.

10 24. A dendrimeric polymer comprising a plurality of native or non-native amino acid residues extending radially asymmetrically from a central core moiety.

25. A dendrimeric polymer as claimed in claim 24, wherein said core moiety is as defined in any one of claims 5 to 7.

20 26. A process for preparing a compound as claimed in any one of claims 1 to 23, said process comprising conjugating at least one reporter moiety to a radially asymmetric dendrimeric polymer backbone comprising a plurality of amino acid residues.

25 27. A process for preparing a compound as claimed in any one of claims 1 to 23, said process comprising the step of deprotecting a partially or fully protected derivative thereof.

30 28. A process for the preparation of a compound comprising a linear, branched or dendrimeric polymer backbone with linked thereto at least one reporter moiety, said polymer backbone comprising a plurality of amino acid residues, said process comprising:

35 (a) stepwise linking of successive protected amino acid residues in the amino to carboxy direction whereby to form a polymer backbone;

(b) linking the polymer backbone to one or more reporter moieties, optionally via a linking group; and

(c) deprotecting any protected group.

29. A pharmaceutical composition comprising a compound as claimed in any one of claims 1 to 23, together with at least one pharmaceutical carrier or excipient.

30. Use of a compound as claimed in any one of claims 1 to 23 in the manufacture of an image enhancing contrast medium or a therapeutic composition.

31. A method of generating an image of the human or non-human animal body, said method comprising the step of administering to said body a compound as claimed in any one of claims 1 to 23 and thereafter generating an image of at least a part of said body.